with the petals, which are oblong with a small dilatation at the base. Stamens none. Ovary ovoid, one-celled, five-lobed, bearing five fleshy accrescent prolongations at the base, alternate with the stigmas and lobes of the ovary, and opposite and covering the petals at the base. Placentae five, the numerous ovules inserted on long funicles. Style small, accrescent, the stigmas five, papillose, at first horizontal then ascending.

Berry one-celled, ellipsoidal, with the basal appendages and style accrescent, the former enclosing a basal concavity. Seeds numerous, rugose after the separation of the sarcotesta. Embryo straight. Cotyledons plane, the caulicle apparent and cylindrical. Endosperm abundant, peripheral. Funicles spongy, filling the cavity of the ovary. The fruit, when cut, exhales the odor of lemon and citron.

Flowers from June to September. The plant occurs at various places in Jallisco and Guanajuata.

The difference between this and *J. heterophylla* (*Mocinna heterophylla* Cerv. ex. La Llave) appear to me clearly specific.

REVIEWS

Sturtevant's Notes on Edible Plants*

When, six years previous to his death in 1893, Dr. E. Lewis Sturtevant, the distinguished first Director of the New York Agricultural Experiment Station at Geneva, retired to private life, he left at the Station a voluminous series of notes comprising a compilation of then-existing knowledge concerning the edible plants of the world. For twenty years this valuable manuscript, the work of nearly a quarter of a century on the part of Dr. Sturtevant, remained untouched. Now, thanks to the able efforts of Dr. Hedrick, Sturtevant's Notes are made available in what, without question, represents one of the most generally useful reports ever issued by a State Agricultural Experiment Station.

* Hedrick, U. P., Sturtevant's Notes on Edible Plants. Pp. vii + 686, Report New York Agricultural Experiment Station, 1919, Pt. II. Also Twenty-seventh Ann. Rep. New York State Dept. Agr., Albany, Vol. 2, Part 2, 1919.

The difficulty of securing precise and reliable information regarding the origin and history of cultivated plants is appreciated by all who have made the attempt. For the most part, the data of this sort contained in readily accessible works is exceedingly scanty and too frequently it is of doubtful accuracy. Hitherto the works of De Candolle have been regarded as the most authoritative source of information along these lines; but De Candolle gives the origin of barely 250 cultivated plants. The present volume lists nearly 3,000 species of plants which may be used for food, most of them cultivated, and especial stress is laid on their origins and histories. Of particular value in this connection are the copious references to the literature, upwards of 6,000 separate citations being given, and nearly 500 different titles being quoted in the bibliography.

Bringing together, as it does, and making available for convenient reference a vast body of facts relative to edible plants, gathered from many widely scattered and often virtually inaccessible sources, Sturtevant's work would be of great value if only as a compilation or compendium of existing knowledge. But the book is more than a compilation: it embodies many original observations on the part of the author—facts not before brought to light and new points of view regarding facts already known. The original home of many esculents is here definitely recorded for the first time; new landmarks in the history of edible plants are pointed out and much new information is brought forth regarding the history of plants, especially those of the New World; fresh observations are presented regarding variations in plants induced by cultivation; and many data are set down that will throw light on various problems of plant geography and acclimatization.

The subject-matter in the text is arranged alphabetically, by genera and species, the *Index Kewensis* being taken as the standard of nomenclature. Following the scientific name, for each genus, is the natural family to which it belongs; for each species, one or more of the English common names. The descriptive matter, which varies in length from a single printed line to as

many as eight pages, ordinarily takes into account the nature of the plant in question, the various characteristics of the edible portion and how it is prepared for eating, its native home, and its history as a cultivated plant. The work concludes with an index to synonyms and one to the common names.

The Notes as published, while based primarily on the manuscript already mentioned, include in addition much material taken from other writings of Sturtevant, both published and unpublished, and due credit must be given to Dr. Hedrick for the efficient manner in which he has completed his arduous editorial task.

GEORGE E. NICHOLS

PROCEEDINGS OF THE CLUB

MEETING OF OCTOBER 27

The meeting was held at the New York Botanical Garden.

The following were elected to membership: Charles Drechsler, A. J. Riker.

The chief item of the program was a discussion by Mr. Henry Bird on "The Production of Acid Soil by Artificial Means." Mr. Bird became interested in this problem as a means of keeping various acid-loving plants alive to serve as insect-food. He succeeded in keeping Sarracenias and various Ericaceous plants for indefinite periods, obtaining flowers and normal growth. His most satisfactory procedure was to apply "acid" by watering the bed frequently with a solution of tannin obtained from hemlock bark.

The second item was an account, illustrated by specimens of an undescribed species of persimmon, *Diospyros Mosieri* Small, from Florida.

Dr. N. L. Britton instanced the occurrence in California and Oregon of ten species of rather widespread eastern sedges, *Cyperus, Eleocharis, Rynchospora* and *Scirpus*. He emphasized their remoteness from the nearest colonies of the same species eastward.